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09/800,843	03/06/2001	Richard J. Langley	21-0005	3680

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/

EXAMINER

CHAWAN, SHEELA C

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 01/16/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/800,843

Applicant(s)

LANGLEY, RICHARD J.

Examiner

Sheela C Chawan

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Drawings***

1. Drawings filed on 3/6/01 have been approved by the draftsman.

***Claim Rejections - 35 U.S.C. § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hauke (US.6,198,836) in view of Itsumi et al.(US.5,559,504).

As per claims 1, 3 and 7, Hauke discloses a method for performing biometric identity verification with improved accuracy , the method comprising the steps of :

scanning ( fig 3, item 12 ) at least two biometric features ( column 4, lines 45- 67 ) of a user simultaneously ( fig 3, item 1 and 2 , recording two images at the same time ) using at least two practically identical biometric scanners ( fig 7, item 26, column 4, lines 19-26) ;

processing data from the at least two scanners ( column 4, lines 19-26 ) in at least one processor ( fig 3, item 20 ) , to obtain biometric data that uniquely identify the scanned biometric features ( column 4, lines 41- 66) ; and

comparing the biometric data with reference biometric data recorded from the user during an enrollment procedure, to verify the identity of the user ( column 3, lines 34- 55).

wherein simultaneous use of multiple biometric scanners provides desirable improvements in accuracy ( column 1, lines 43- 45) and processing speed, at a lower cost (column 1, lines 64- 67, column 2, lines 1-13, column 4, 18- 31, 45- 52 ).

Hauke discloses a method and device for recognizing fingerprints . Hauke is silent about specific details of using a single, larger biometric scanner .

Itsumi discloses a surface shape sensor, identification device using this sensor, and protected system using this device, wherein scanning at least two fingerprints uses a single ( abstract, column 9, lines 11- 16, column 15, lines 8- 14), larger biometric scanner ( column 1, lines 23- 35, 40- 44, 50- 55, column 2, lines 32- 47). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Hauke to include a single, larger biometric scanner. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Hauke by the teaching of Itsumi in order to shorten the time required for the whole signal processing, and the size of the sensor can be decreased, ( as suggested by Itsumi at column 3, lines 18- 30 ) .

As per claim 4, Itsumi discloses a method wherein the step of scanning ( fingers pressed against a suitable optical device is a scanner, fig 3, item 12) at least two fingerprints ( column 9, lines 11-16, column 15, lines 8- 14) includes scanning the

fingerprints with at least two two-dimensional scanners ( column 1, lines 23-29, 40- 44, 50- 55 ) .

As per claim 8, Itsumi discloses a system wherein the at least one processor ( fig 3 item 20 ) includes at least two processors operating in parallel ( fig 3, item 19, column 3, lines 34- 39, column 4, lines 16- 31 ).

As per claim 9, Itsumi discloses a wherein the scanners are fingerprint scanners ( fig 3, item 12 optical device is a scanner ), for scanning at least two fingerprints of the user simultaneously ( fig 3, item 1 and 2 ).

As per claim 10, Itsumi discloses a system wherein the fingerprint scanners are twodimensional scanners ( column 1, lines 23- 29, 40- 44, 50- 55, column 9, lines 11- 16, column 15, lines 8- 14).

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hauke (US.6,198,836) in view of Riganati et al.( US. 4,151,512) .

As per claim 2, claim 2 recites similar limitation as claim 1 above and similarly analyzed. Hauke is silent about specific details of processing at least two processors operating in parallel; and wherein simultaneous use of multiple biometric scanners .

Riganati discloses automatic pattern processing system . The system comprises of :

processing at least two processors operating in parallel ( column 7, lines 40- 52);

wherein simultaneous use of multiple biometric scanners ( the system could be modified to scan the plurality of fingerprints in parallel or serial and to feed that information to the information processor , fig 2A and 2B item 20, column 7, lines 40- 52, column 8, lines 42- 60).Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Hauke to include the step of processing at least two processors operating in parallel. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Hauke by the teaching of Riganati in order to achieve the most efficient use thereof and parallel processing shortens the recognition processing time ( as suggested by Riganat at column 7, lines 50- 52 ) .

4. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hauke (US.6,198,836) in view of Itsumi et al.(US.5,559,504).

As per claims 5, claim 5 recites similar limitation as claim 1 above and similarly analyzed. Hauke is silent about specific details of scanning at least two fingerprints of a user simultaneously, using at least two practically identical one-dimensional scanners ( column 3, lines 18- 49) ;

including converter one-dimensional scanner data to two-dimensional fingerprint data, to obtain biometric data that uniquely identify the scanned biometric features ; and

using a single, larger biometric scanner and the step of processing the data from the scanners includes converting one-dimensional scanner data to two-dimensional fingerprint data.

Itsumi discloses a surface shape sensor, identification device using this sensor, and protected system using this device. The system comprises of :

scanning at least two fingerprints of a user simultaneously abstract, column 9, lines 11-16, column 15, lines 8-14 ), using at least two practically identical one-dimensional scanners ( column 3, lines 18- 49) ;

including converter one-dimensional scanner data to two-dimensional fingerprint data, to obtain biometric data that uniquely identify the scanned biometric features ( column 1, lines 40- , column 2, lines 13- 56 ) ; and

using a single, larger biometric scanner ( column 1, lines 23- 35, 40- 44, 50- 55, column 2, lines 32- 47), and the step of processing the data from the scanners includes converting one-dimensional scanner data to two-dimensional fingerprint data ( abstract, column 9, lines 11- 16, column 15, lines 8- 14) .

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Hauke to include at least two practically identical one-dimensional scanners. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Hauke by the teaching of Itsumi in order to shortened the time required for the whole signal processing can be shortened , and the size of the sensor can be decreased (as suggested by Itsumi at column 3, lines 18- 30 ) . I

As per claim 6, Itsumi discloses a method wherein the step of scanning at least two fingerprints uses a single ( abstract, column 9, lines 11- 16, column 15, lines 8- 14),

logically segmented one-dimensional scanner ( column 1, lines 23- 35, 40- 44, 50- 55, column 2, lines 32- 47).

5. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hauke (US.6,198,836) in view of Riganati et al.( US. 4,151,512) .

As per claims 11 and 12, recites similar limitation as claim 1 above and similarly analyzed. Hauke is silent about specific details of two processors ordinarily in parallel each including conversion logic, for processing data from the at least two scanners to obtain biometric data that uniquely identify the scanned biometric feature;

including converting one-dimensional scanner data to two-dimensional fingerprint data .

Riganati discloses automatic pattern processing system . The system comprises of : two processors ordinarily in parallel ( column 7, lines 40- 52) each including conversion logic ( column 9, lines 9-21, 49- 55 ), for processing data from the at least two scanners to obtain biometric data that uniquely identify the scanned biometric feature ( column 6, lines 55- 68, column 7, lines 1 - 51);

including converting one-dimensional ( column 8, lines 42- 64 ) scanner data to two-dimensional fingerprint data ( fig 7, column 2, lines 19- 48 ). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Hauke to include the step of processing at least two processors operating in parallel. It would have been obvious to one of ordinary skill in the art at the time of



the invention to have modified Hauke by the teaching of Riganati in order to achieve the most efficient use thereof ( as suggested by Riganat at column 7, lines 50- 52 ) .

***Other prior art cited***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McMahon (US.3,968,476)discloses spurious signal removal in optical processor fingerprint identification apparatus .

Setlak et al. ( US.5,841,888) discloses method for fingerprint indexing and searching .

McCalley et al. (US.5,956, 415) discloses enhanced security fingerprint sensor package and related methods.

Setlak (US. 5,953,441) discloses fingerprint sensor having spoof reduction features and related methods.


Scott et al. (US.6,484, 260 B1) discloses personal identification system.


**Contact Information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela C Chawan whose telephone number is 703-305- 4876. The examiner can normally be reached on Monday through Thursday 7.30 a.m. to 6.00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (703) 308 - 5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.

  
Sheela Chawan  
Patent Examiner  
Group Art Unit 2625  
Jan 7, 2004

  
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